Application No.: 10/628,308 Attorney Docket No.: 229752001220

## ABSTRACT OF THE DISCLOSURE

A method of producing a tissue includes placing a molding support within a body cavity for a time and under conditions sufficient for non-vascularized tissue comprising myofibroblasts to form on the molding support. In some embodiments, the tissue produced by this method is particularly useful as vascular tissue for the treatment or prophylaxis of diseased or damaged blood vessels such as in atherosclerosis.